

What is claimed is:

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1. An actuating mechanism for pressurizing a device, said mechanism comprising a housing; a carrier member disposed generally in the housing; a threaded screw structure slidably displaceable through the housing; a nut member generally in the carrier member, said nut member having partial threads and being selectively engageable and disengageable with the threaded screw structure; at least one link member engaged with the nut member; and link structure which couples the carrier member to the at least one link member, wherein the nut member and at least one link member are pivotable relative to the carrier member, wherein said actuating mechanism is configured such that the nut member is selectively moveable relative to the screw structure to provide selective threaded engageability of the partial threads with the screw structure.

2. An actuating mechanism as recited in claim 1, wherein the housing has an end and the carrier member is disposed in an opening proximate the end of the housing.

3. An actuating mechanism as recited in claim 2, wherein the housing has an opposite end configured to receive a pressure gauge directly into a threaded bore.

4. An actuating mechanism as recited in claim 2, wherein the housing has an opposite end, said actuating mechanism further comprising a pressure gauge at the opposite end.

5. An actuating mechanism as recited in claim 1, wherein the carrier member is configured to be retainably engaged with the housing via a bayonet arrangement. *Pictures*

6. An actuating mechanism as recited in claim 5, wherein the carrier member includes a latching finger.

7. An actuating mechanism as recited in claim 6, wherein the housing includes at least one raised rib which engages the latching finger on the carrier member.

8. An actuating mechanism as recited in claim 1, wherein the nut member is bifurcated to provide a pair of opposingly spaced mounting portions extending from the partial threads of the nut member. *# 24 + 25*

9. An actuating mechanism as recited in claim 8, wherein the mounting portions are coupled to the housing by a pair of adjacently arranged link members which are separately coupled to the mounting portions and are disposed therebetween while being operable in tandem to guide translating motion of the nut member.

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10. An actuating mechanism as recited in claim 1, wherein the nut member is configured to move in a plane in a diminishing curved path in traveling between an engaged position and a disengaged position.

BRIEF Summary

11. An actuating mechanism as recited in claim 1, wherein the carrier member is received in a bore in the housing and a radius of the bore is larger than a distance from a center line of the threaded screw structure to the link structure which engages the carrier member.

10² 12. An actuating mechanism as recited in claim 1, wherein said threaded screw structure has a first end and a second end opposite said first end, wherein said first end of said threaded screw structure provides a handle, said actuating mechanism further comprising a piston, said piston engaged with the second end of the threaded screw structure.

13. An actuating mechanism as recited in claim 1, wherein said housing provides a fluid displacement chamber, wherein said carrier member has a bore having a radius and said fluid displacement chamber has a bore having a radius, and wherein the radius of the bore of said carrier member is not less than the radius of the bore of the fluid displacement chamber.

14. A method of assembling an actuating mechanism, said method comprising: sliding a piston into an end of a housing; sliding a carrier member into the housing through the end of the housing; rotating the carrier member thereby providing that the carrier member generally locks in place with respect to the housing; installing link members in a nut member; placing the nut member generally into the carrier member; engaging a pivot pin with the carrier member and the link members; sliding a plunger into the end of the housing through the nut member and carrier member; and engaging the plunger with the piston.

15. A method as recited in claim 14, further comprising engaging a hose with an opposite end of the housing.

16. A method as recited in claim 14, further comprising engaging a gauge with the housing.

17. A method as recited in claim 14, further comprising placing a sealing member on the piston.

17. A method as recited in claim 14, further comprising placing a sealing member on the piston.